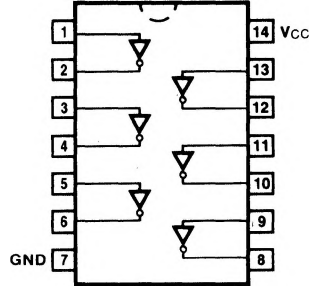


# 54/7416

## HEX INVERTER BUFFER/DRIVER (With Open-Collector High-Voltage Output)

### CONNECTION DIAGRAM PINOUT A



**ORDERING CODE:** See Section 9

PKGS	PIN OUT	COMMERCIAL GRADE	MILITARY GRADE	PKG TYPE
		$V_{CC} = +5.0\text{ V} \pm 5\%$ , $T_A = 0^\circ\text{C to } +70^\circ\text{C}$	$V_{CC} = +5.0\text{ V} \pm 10\%$ , $T_A = -55^\circ\text{C to } +125^\circ\text{C}$	
Plastic DIP (P)	A	7416PC		9A
Ceramic DIP (D)	A	7416DC	5416DM	6A
Flatpak (F)	A	7416FC	5416FM	3I

**INPUT LOADING/FAN-OUT:** See Section 3 for U.L. definitions

PINS	54/74 (U.L.) HIGH/LOW
Inputs	1.0/1.0
Outputs	OC**/10

**DC AND AC CHARACTERISTICS:** See Section 3\*

SYMBOL	PARAMETER	54/74		UNITS	CONDITIONS	
		Min	Max			
VOL	Output LOW Voltage	XC	0.7	V	$I_{OL} = 40\text{ mA}$	$V_{CC} = \text{Min}$ $V_{IN} = V_{IH}$
		XM	0.7		$I_{OL} = 30\text{ mA}$	
		XC, XM	0.4		$I_{OL} = 16\text{ mA}$	
IOH	Output HIGH Current		0.25	mA	$V_{OH} = 15\text{ V}$ , $V_{CC} = \text{Min}$ $V_{IN} = V_{IL}$	
ICCH	Power Supply Current		48	mA	$V_{IN} = \text{Gnd}$	$V_{CC} = \text{Max}$
ICCL			51		$V_{IN} = \text{Open}$	
tPLH	Propagation Delay		15	ns	Figs. 3-2, 3-4	
tPHL			23			

\*DC limits apply over operating temperature range; AC limits apply at  $T_A = +25^\circ\text{C}$  and  $V_{CC} = +5.0\text{ V}$ .

\*\*OC — Open Collector